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**TRANSMITTAL
FORM**

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Filing Date March 16, 2001

First Named Inventor Toshihiro Shima

Art Unit 2625

Examiner Name K. Y. Poon

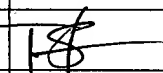
Attorney Docket Number 04783/018001

ENCLOSURES (Check all that apply)☐ Fee Transmittal Form☐ Fee Attached☐ Amendment/Reply☐ After Final☐ Affidavits/declaration(s)☐ Extension of Time Request☐ Express Abandonment Request☐ Information Disclosure Statement☐ Certified Copy of Priority Document(s)☐ Reply to Missing Parts/
Incomplete Application☐ Reply to Missing Parts under
37 CFR 1.52 or 1.53☐ Drawing(s)☐ Licensing-related Papers☐ Petition☐ Petition to Convert to a
Provisional Application☐ Power of Attorney, Revocation
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to TC☐ Appeal Communication to Board of
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Amended Appellant's Brief Under 37 C.F.R.
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Date July 19, 2007

Reg. No. 33,986



Docket No.: 04783/018001
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Toshihiro Shima

Confirmation No.: 3378

Application No.: 09/810,949

Art Unit: 2625

Filed: March 16, 2001

Examiner: K. Y. Poon

For: PRINTER FOR MANAGING A PLURALITY
OF PRINT JOB DATA

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

MS Appeal Brief - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

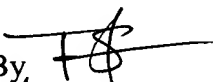
This communication is in response to the Notification of Non-Compliant Appeal Brief under 37 CFR §41.37 dated June 19, 2007.

Enclosed herewith is an Amended version of the Appeal Brief filed on May 2, 2007. The Amended Appeal Brief identifies the status of the claims and the claims that are appealed in the "Status of the Claims" section. Further, as indicated in the "Status of the Claims" section, independent claim 7 is not involved in the appeal. Therefore, independent claim 7 does not appear in the "Summary of the Claimed Subject Matter" section. Additionally, the "Grouping of the Claims" section is removed per discussion with the Ms. Hood of the USPTO. Also, the "Grounds of the Rejection" section and the "Argument" section include dependent claims not previously listed in either section.

Applicant believes the enclosed amended appeal brief is fully responsive to all outstanding issues. If this belief is incorrect, or other issues arise, the Board is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number: 04783/018001).

Dated: July 19, 2007

Respectfully submitted,

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Attachment (Amended Appeal Brief)



Docket No.: 04783/018001
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Toshihiro Shima

Confirmation No.: 3378

Application No.: 09/810,949

Art Unit: 2625

Filed: March 16, 2001

Examiner: K. Y. Poon

For: PRINTER FOR MANAGING A PLURALITY
OF PRINT JOB DATA

MS Appeal Brief- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDED APPELLANT'S BRIEF UNDER 37 C.F.R. § 41.37

Pursuant to 37 C.F.R. § 41.37, please consider the following Appellant's Brief in the referenced Application currently before the Board of Patent Appeals and Interferences.

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I. Real Party in Interest

The real party in interest for the referenced application is Seiko Epson Corporation. An Assignment transferring all interest in the referenced application from the inventor to Seiko Epson Corporation was filed with the USPTO on July 31, 2001. The Assignment is recorded at Reel 012038, Frame 0614.

II. Related Appeals and Interferences

To the best of the knowledge of the Appellant and the Appellant's legal representative, there are no other appeals or interferences that will directly affect, be affected by, or have a bearing on the decision of the Board of Patent Appeals and Interferences ("the Board") in this appeal.

III. Status of Claims

Claims 1, 4-15, 30, 34-47 are pending in the '949 Application.

Claims 2, 3, 16-29, and 31-33 are cancelled.

Claims 7, 37, and 45-47 are allowed.

Claims 1, 4-6, 8-15, 30, 34-36, and 38-44 stand finally rejected and are the subject of this appeal.

IV. Status of Amendments

All of the amendments have been entered and considered by the Examiner. No amendments have been filed subsequent to the final Office Action dated October 24, 2006. The claims of record are presented in the Claims Appendix.

V. Summary of Claimed Subject Matter

In general, the invention relates to being able to manage print jobs from a host machine when RAW mode of communication is used (*see, e.g.*, Specification, p. 10, ll. 9-11). For example, the host machine may begin the print job, view the status of the print job, and cancel the print job at various stages of the printing (*see, e.g.*, Fig. 24). In order to enable the host machine to manage the print job when the print jobs are sent as a stream of data using a RAW mode of communication, the printer must have a technique for distinguishing between individual print jobs. Embodiments of the invention use two patterns (i.e., start-end pattern and end-edge pattern) which demarcate the start and end of a print job (*see, e.g.*, Specification, p. 14 and Fig. 3). When the starting pattern is identified, the data is collected and grouped as a print job until the ending pattern is obtained (*see, e.g.*, Specification, p. 14 and Fig. 3). The group data is then assigned an identifier which allows the printer to distinguish between the print job and other received print jobs. By using the identifier of the print job, the host machine and the printer are able to manage an entire print job without affecting the printing of other print jobs and without wasting resources unnecessarily (*see, e.g.*, Specification, p. 14).

For example, consider the scenario in which a user on the host machine sends three files to the printer for printing in succession using RAW mode communication. Accordingly, the printer receives a starting pattern, the first file as the first print job, an ending pattern, a starting pattern, the second file as the second print job, an ending pattern, a starting pattern, the third file as the third print job, and an ending pattern. When the printer receives the print jobs, the printer uses the start-end pattern and the end-edge pattern to identify the three print jobs and assigns an identifier to each print job. During various stages of the printing (e.g., spooling, generating an image, and printing on paper), the printer updates the status and manages the three print jobs according to the identifiers.

Thus, when the user realizes that the user sent the wrong second file in the second print job before images of each page are even created, the user may cancel the second print job by sending a cancellation request with an identifier of the second print job without wasting the processing of creating the images for the second print job. The cancellation of the second print job may not require the cancellation of the first print job or the third print job. The printer receives the cancellation request and stops printing the second job.

As shown by way of the example above, the invention claimed in the '949 application is related to a printer for managing print jobs. Specifically, claim 1 requires, in part, the following: a job managing means (*see, e.g.*, "job accepting means," 204 in Fig. 2 and p. 10, ll. 3-8) accepts reception data which includes multiple print jobs in succession from a RAW-Mode physical channel. An extracting means (*see, e.g.*, "print job extracting section," ref. no. 205 in Fig. 2 and p. 10, ll. 9-20 in the Specification) of the printer extracts the print job by grouping reception data between the starting pattern and the ending pattern into an accepted job. After grouping, an assigning means (*see, e.g.*, "print job extracting section," ref. no. 205 in Fig. 2 and p. 10, ll. 9-20 in the Specification) issues identifying information for the accepted job and assigns the issued identifying information. The job managing means (*see, e.g.*, "job managing section," ref. no. 211 in Fig. 2 and Fig. 21, and p. 10 ll. 20-22, p. 11 ll. 17-23, and p.12 ll. 12-p.13 ll. 5 in the Specification) uses the identifying information from the assigning means to manage the accepted job. When the accepted job is managed, the accepted job becomes a managed job. After the accepted job becomes a managed job, a generating means (*see, e.g.*, "image generating section," ref. no. 208 in Fig. 2 and p. 11 ll. 17-23 in the Specification) generates image data for the managed job. Using the image data, the print means (*see, e.g.*, "print mechanism section," ref. no. 209 and 210 in Fig. 2 and p. 11, ll. 17-23 in the Specification) prints on a print recording medium. Thus, claim 1 requires an order

whereby a print job is extracted, grouped, issued identifying information, and managed before an image is generated for the print job. Because of the required order, the print job is managed before an image is even generated for the print job. Thus, the printer does not have to waste processing time for generating an image for a print job that is canceled before the image is generated such as in the previous example.

Claim 4 is dependent on claim 1. In addition to claim 1, claim 4 requires the following: a spool means (*see, e.g.*, “spool section,” ref. no. 206 in Fig. 2 and p. 10, ll. 20 - p. 11 ll. 11 in the Specification) which stores the print job data assigned with the job identifying information. The print job data is to be output from the spool means in a predetermined order. Further, the generating means of claim 1 interprets the print job data, which is outputted from the spool means, and generates the image data based on the results of the interpretation.

Under 35 U.S.C. § 112, paragraph 6, “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” Thus, while corresponding structure has been pointed out above for limitations expressed in means plus function format, the scope of the claims is not limited solely to this structure but rather also includes equivalents thereof.

VI. Grounds of Rejection to be Reviewed on Appeal

The present appeal addresses the following ground of rejection:

Whether claims 1, 4, 8, 9, 13-15, 34, and 38-44 are patentable under 35 U.S.C. § 103(a) over U.S. Patent No. 5,589,711 (“Barry”) in view of U.S. Patent No. 5, 633,992 (“Gyllenskog”).

Whether claims 5, 6, 30, 35, and 36 are patentable under 35 U.S.C. § 103(a) over Barry in view of Gyllenskog in further view of U.S. Patent No. 5,754,747 (“Reilly”).

Whether claims 10-12 are patentable under 35 U.S.C. § 103(a) over Barry in view of Gyllenskog in further view of U.S. Patent No. 6,181, 436 (“Kurachi”).

VII. Argument

A. Claims 1, 4, 8, 9, 13-15, 34, and 38-44 are patentable under 35 U.S.C. §103(a) over U.S. Patent No. 5,589,711 (“Barry”) in view of U.S. Patent No. 5,633,992 (“Gyllenskog”).

Under 35 U.S.C. § 103(a), a claim in a patent application may be rejected if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains” (*see* 35 U.S.C. § 103(a)).

“Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art are to be resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined” *Graham v. John Deere*, 383 U.S. 1 (1966). *In re Royka* holds that to establish prima facie obviousness of a claimed invention, all the claim limitations must be shown or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ (CCPA 1974).

The Supreme Court’s recent opinion in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 2 (2007) provides additional guidance in this area. Although finding the Federal Circuit’s

teaching-suggestion-motivation test too narrow to be employed as the sole test for obviousness, the Court underscored the importance of viewing the obviousness through the eyes of one skilled in the art. When such a viewpoint is properly applied to the pending claims, the rejections are clearly untenable. Moreover, the holding of *Royka* stands firm. *KSR* dealt with the situation where all claim elements were known in a prior art combination, and thus addressed the issue of obviousness to combine. In the instant case, as detailed below, certain limitations are not shown or suggested by *any* of the prior art of record. Thus, under any standard, the rejection must fail.

1. Barry fails to show or suggest generating image data from a managed job

Claim 1 recites, in part,

extracting means that extracts a print job in the plurality of print jobs from the series of reception data to create an accepted job, wherein extracting the print job comprises: accepting data in the series of reception data from a start-end pattern data to an end-edge pattern data to obtain accepted data; and grouping the accepted data into the accepted job;
assigning means for issuing identifying information for the accepted job and assigning the issued identifying information;
job managing means for managing the accepted job on the basis of the identifying information to obtain a managed job;
[and]
generating means for generating, as a process for the job, image data on the basis of the managed job. (emphasis added).

As discussed above, claim 1 requires that the generating means uses *a managed job*. Further, claim 1 requires that the managed job is only obtained after print job is received, extracted, and assigned. Accordingly, the generating means must necessarily generate the image data *after* the extracting means extracts the print job. Because of the order in which a print job is extracted, managed, and then an image generated, the claimed invention allows for the print job to be cancelled without requiring a waste of processing resources to generate the image data for a cancelled job as discussed above.

In contrast, Barry is directed toward distributing individual pages of a single print job to multiple print engines. In order to distribute the pages of a single print job, Barry teaches creating an image for each page using rasterized image processing (RIP), which is performed by a RIP engine (*see, e.g., Barry Abstract*). The RIP engine converts the data of a print job into the images (*i.e., image data*) that will be printed (*see Barry, col. 2, ll. 54-56*).

Because an image is generated for each page and images cannot span more than one page, the RIP operation “effectively divides each print job into pages” (*see Barry, col. 4, ll. 63-64*). Only *after* the RIP operation is performed, are the pages stored in individual page buffers, which are deemed individual print jobs (*see Barry, col. 4, ll. 64-66*). Thus, Barry teaches that the RIP is performed *before* the page is separated from the print job by effectively defining an order whereby individual page-based print jobs are defined *only when* pages are placed in the page buffer.

In order to support the rejection, the Examiner argues that a RIP operation of Barry teaches the “generating means for generating...the image data on the basis of

the managed job;” and the identification of page-based print jobs teaches “extracting means that extracts a print job in the plurality of print jobs from the series of reception data to create an accepted job” (*see* Office Action dated October 24, 2006, p. 2-3).

However, because the RIP operation in Barry creates the image data and identifies the page breaks, the individual page-based jobs cannot be extracted before performing the RIP operation as would be required under the Examiner’s construction of claim 1. In fact, Barry cannot achieve the advantages of the claimed invention in the ‘949 application in which a print job may be cancelled and the printer does not waste processing time of creating the image data for the print job.

Moreover, Barry is devoid of any disclosure or suggestion of extracting the individual page-based jobs before generating image data. In particular, in Barry, because it is the RIP operation that identifies page breaks, there would be no reason to pre-identify page breaks in order to extract the individual page-based jobs because that would result in an unnecessary extra processing step which would contradict Barry’s consideration of the speed of the printer in printing print jobs (*see* Barry, col. 1, ll. 38-39).

In view of the above, Barry does not show or suggest a generating means that uses a print job, which has already been extracted, as required by independent claim 1. Gyllenskog does not teach that which Barry lacks. Specifically, Gyllenskog is directed toward packetized communication between the printer and a computer (*see* Gyllenskog, Abstract). Gyllenskog is completely silent with respect to generating image data. Thus, Gyllenskog cannot be used to show or suggest “generating means

for generating, as a process for the job, image data on the basis of the managed job” when a managed job is created after “extracting means that extracts a print job in the plurality of print jobs from the series of reception data to create an accepted job” as required by independent claim 1.

2. Barry fails to show or suggest extracting means

Claim 1 recites, in part,

extracting means that extracts a print job in the plurality of print jobs from the series of reception data to create an accepted job, wherein extracting the print job comprises:
accepting data in the series of reception data from a start-end pattern data to an end-edge pattern data to obtain accepted data;
and grouping the accepted data into an accepted job.

The aforementioned limitation requires that an entire print job in the reception data be demarcated by a start-end pattern and an end-edge pattern.

Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc) holds that “[t]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” 415 F.3d at 1313 (emphasis added). Based on *Phillips*, the proper interpretation of a print job in claim 1 would be that a print job is the complete task that is sent from the host machine to the printer. The definition of a print job as a complete task is evident in the use in the Specification in which a print job is described as a request that a document, such as a file, multiple files, or a portion of a file, is printed (*see, e.g.*, Specification of the ‘949

Application, p. 9). Further, as shown by the “final page” decision box of Figure 17 of the present application, a print job may encompass multiple pages.

Further, Barry teaches that “[t]ypically, printers receive the print job in a conventional manner, which is a string of digits and the printers determine whether the codes are for an end of page, command, etc” (*see* Barry, col. 4, ll. 44-46). Because a print job in Barry has codes for an end of page, then a print job must potentially encompass multiple pages. Otherwise the code for the end of page would not be required. More explicitly, Barry teaches, “a print job, although initiated as a series of pages, is sent as a single job to a printer” *see* Barry col. 4, ll. 42-44. Thus, even in Barry, a print job is a complete task that is sent from a workstation to a printer.

In order to support the rejection, the Examiner improperly asserts that the aforementioned codes denoting an end of a page can be equated to a start-end pattern and an end-edge pattern of a print job of the claimed invention. Thus, the Examiner effectively equates a page to a print job. However, Examiner’s definition directly contradicts the definition that complies with the Specification and even with Barry wherein a print job is the complete task that is sent from a host machine to a printer. As shown above, even Barry teaches that a print job may encompass multiple pages and the codes are used within the print job are used to denote the individual pages.

Using a definition that comports with the Specification of the referenced application, Barry is completely silent as to anything even resembling a start-end pattern and an end-edge pattern *of a print job*. In fact, nowhere in Barry is a start-end pattern and an end edge pattern used to extract print jobs. Accordingly, Barry

does not show or suggest extracting means that extracts a print job in the plurality of print jobs from the series of reception data to create an accepted job, wherein extracting the print job comprises: accepting data in the series of reception data from a start-end pattern data to an end-edge pattern data to obtain accepted data; and grouping the accepted data into an accepted job.

Moreover, a person skilled in the art would not be inclined to modify Barry because Barry is directed toward a network printer, such as an Ethernet printer (*see* Barry, col. 4, ll. 30-33). The print jobs in the network printer generally use packetized format for communication in which a print job is sent as discrete data packets that may be interspersed with other print jobs. The packets are used in a network environment in order to allow the data to pass through one or more network routers without clogging each router. Because the data received in between the start of the print job and the end of the print job may encompass data from other print jobs, a start-end pattern and end-edge pattern may not be used to identify print jobs. Thus, using codes in Barry to identify the start and end of a print job would not result in the capability to extract a print job without potentially unintentionally extracting data from other print jobs.

Gyllenskog also does not show or suggest the aforementioned limitation. Specifically, similar to Barry, Gyllenskog uses packets for transmitting and receiving print jobs (*see* Gyllenskog Abstract). Generally when packets are used, a print job is divided into packets and the header of each packet is used to identify and separate the print job from other print jobs whose packets are being received by the printer. Because receiving a print job is performed using packets, an end-edge pattern is not

required nor disclosed in Gyllenskog to extract a print job. Thus, Gyllenskog does not show or suggest “accepting data in the series of reception data from a start-end pattern data to an end-edge pattern data to obtain accepted data; and grouping the accepted data into an accepted job.”

3. Claims 4 and 34

Claims 4 and 34 are additionally nonobvious over the prior art. Dependent claim 4 recites “a spool means for storing the print job data assigned with the job identifying information to be outputted in a predetermined order, said generating means interpreting the print job data to be outputted from said spool means and generating image data.” Accordingly, claim 4 requires that the generating means uses as input the print job data, which is output from the spool means. Specifically, the spool means first spools the print job data. Then the generating means interprets the print job data, which is output from the spool means.

The portion of Barry relied upon by the Examiner to teach the aforementioned limitation discloses, “[i]n general, the software RIP can rasterize an entire job, store it on disk, and then start sending it to another recording engine, this being the preferred mode when utilizing slower recording engines and when rasterized data must be saved on disk for reuse later. Alternatively, the RIP is operable to pass rasterized pages to the print engines at the same time it writes them to disk” (*see*, Barry col. 17, ll. 12-19 and Office Action dated October 24, 2006, p. 4). The Examiner further states that the spool means is the disk, and as discussed

above, the Examiner equates the generating means of the referenced application with the RIP in Barry. However, Barry clearly teaches that the disk only stores image data that has already been processed by the RIP.

Thus, in contrast to claim 4, which requires that the generating means interprets the print job data that is output from the spool means, the output of the disk is not interpreted by the RIP. Therefore, Barry fails to show or suggest the limitation of dependent claim 4.

Further, Gyllenskog fails to show or suggest that which Barry lacks. Specifically, as discussed above, Gyllenskog is silent with respect to generating image data. Thus, Gyllenskog cannot be used to show or suggest “said generating means interpreting the print job data to be outputted from said spool means and generating image data.”

In view of the above, neither Barry nor Gyllenskog shows or suggests all of the limitations of dependent claim 4. Accordingly, claim 4 is patentable over Barry and Gyllenskog under 35 U.S.C. § 103(a). Claim 34 is dependent on claim 4 and is nonobvious for at least the same reasons.

4. Conclusion

In view of the above, it is clear that neither Barry nor Gyllenskog shows or suggests all of the limitations of independent claim 1. Accordingly, claim 1 is patentable over Barry and Gyllenskog under 35 U.S.C. § 103(a). If an independent claim is non-obvious, then under 35 U.S.C. § 103(a), any claim depending therefrom

is also non-obvious. *In re Fine*, 837 F.2d 1071, 5 USPQ 2d 1596 (Fed Cir. 1988). Moreover, claim 4, and thus also claim 34 depending therefrom, has been shown to be additionally patentable over the cited prior art. Accordingly, for these reasons, Applicant requests that the Board reverse the Examiner's rejection with respect to claims 1, 4, 8, 9, 13-15, 34, and 38-44.

B. Claims 5, 6, 30, 35, and 36 are patentable under 35 U.S.C. §103(a) over Barry in view of Gyllenskog and further in view of U.S. Patent Number 5,754,747 ("Reilly").

Claims 5, 6, 30, 35, and 36 are dependent, directly or indirectly, from claim 1. As discussed above, Barry and Gyllenskog, whether considered together or separately fail to show or suggest all of the limitations of independent claim 1. Specifically, Barry and Gyllenskog fail to show or suggest an extracting means that extracts a print job by accepting data from a start-end pattern to an end-edge pattern and grouping the accepted data into the accepted job. Further, Reilly fails to show or suggest that which Barry and Gyllenskog lack. Specifically, similar to Gyllenskog, Reilly is directed to network printers using packetized communication. As discussed above, in packetized communication, packets are sent with headers to define to which print job the packet belongs. Because receiving a print job is performed using packets, an end-edge pattern is not required nor disclosed in Reilly to extract a print job. Thus, Reilly also does not show or suggest "accepting data in the series of reception data from a start-end pattern data to an end-edge pattern data to obtain accepted data; and grouping the accepted data into an accepted job."

Accordingly, independent claim 1 is allowable over Barry in view of Gyllenskog in further view of Reilly. Dependent claims 5, 6, 30, 35, and 36 are allowable for at least the same reasons. Accordingly, for these reasons, Applicant requests that the Board reverse the Examiner's rejection with respect to claims 5, 6, 30, 35, and 36.

C. Claims 10-12 are patentable under 35 U.S.C. §103(a) over Barry in view of Gyllenskog and further in view of U.S. Patent Number 6,181,436 ("Kurachi")

Claims 10-12 are dependent, directly or indirectly, from claim 1. As discussed above, Barry and Gyllenskog, whether considered together or separately fail to show or suggest all of the limitations of independent claim 1. Specifically, Barry and Gyllenskog fail to show or suggest an extracting means that extracts a print job by accepting data from a start-end pattern to an end-edge pattern and grouping the accepted data into the accepted job. Further, Reilly fails to show or suggest that which Barry and Gyllenskog lack. Specifically, similar to Gyllenskog and Reilly, Kurachi also teaches a network environment with network printers using packetized communication. Thus, similar to Gyllenskog and Reilly, Kurachi also does not show or suggest "accepting data in the series of reception data from a start-end pattern data to an end-edge pattern data to obtain accepted data; and grouping the accepted data into an accepted job."

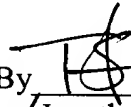
Accordingly, independent claim 1 is allowable over Barry in view of Gyllenskog in further view of Reilly. Dependent claims 10-12 are allowable for at least the same reasons. Accordingly, for these reasons, Applicant requests that the Board reverse the Examiner's rejection with respect to claims 10-12.

VIII. Conclusion

In view of the above, reversal of the rejections and allowance of all claims is requested. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 04783/018001).

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Respectfully submitted,

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CLAIMS APPENDIX

Claims of Record in the Application

1. A printer to be connected to a host machine, comprising:

job accepting means for accepting a series of reception data via a RAW-mode physical channel from said host machine, wherein the series of reception data comprises a plurality of print job data, and wherein the plurality of print job data comprises a plurality of print jobs in succession;

extracting means that extracts a print job in the plurality of print jobs from the series of reception data to create an accepted job, wherein extracting the print job comprises:

accepting data in the series of reception data from a start-end pattern data to an end-edge pattern data to obtain accepted data; and

grouping the accepted data into the accepted job;

assigning means for issuing identifying information for the accepted job and assigning the issued identifying information;

job managing means for managing the accepted job on the basis of the identifying information to obtain a managed job;

generating means for generating, as a process for the job, image data on the basis of the managed job; and

print means for control to print on a print recording medium on the basis of the generated image data.

2-3. (Cancelled)

4. The printer according to claim 1, further comprising spool means for storing the print job data assigned with the job identifying information to be outputted in a predetermined order, said generating means interpreting the print job data to be outputted from said spool means and generating image data.
5. The printer according to claim 1, wherein said extracting means searches for predetermined language identifying information from among the series of reception data and specifies a language kind of the print job data to be extracted.
6. The printer according to claim 5, wherein said extracting means extracts print job data from among the series of reception data on the basis of end-edge pattern data corresponding to the specified language kind.
7. A printer to be connected to a host machine, comprising:
 - job accepting means for accepting a print job from a plurality of print job data sent as a series of reception data via a RAW-mode physical channel from said host machine;
 - extracting means that extracts the print job data on a job-unit basis from the series of reception data;
 - assigning means for issuing identifying information for the accepted job and assigning the issued identifying information;
 - generating means for generating, as a process for the job, image data on the basis of the print job data;
 - print means for control to print on a print recording medium on the basis of the generated image data as a process for the job; and
 - job managing means for managing the accepted job on the basis of the identifying information,

wherein said assigning means assigns identifying information containing interface identifying information representative of a kind of the exclusive interface.

8. The printer according to claim 1, further comprising job manage request accepting means for accepting a job manage request containing identifying information from said host machine.
9. The printer according to claim 8, wherein said job managing means specifies a predetermined job on the basis of identifying information contained in the accepted job manage request.
10. The printer according to claim 9, wherein said job managing means controls at least any of said job accepting means, said generating means and said printing means to suspend from processing the job specified on the basis of the identifying information where the accepted job manage request is a cancel request.
11. The printer according to claim 10, wherein the respective ones of said job manage request accepting means, said generating means and said printing means process for a job other than the specified job where controlled by said job managing means to suspend a process for the specified job.
12. The printer according to claim 11, wherein said job managing means controls said printing means before controlling said job accepting means and said generating means.
13. The printer according to claim 8, wherein at least any of said job manage request accepting means, said generating means and said printing means notifies said job managing means of a status of a process for the job.
14. The printer according to claim 13, wherein job managing means notifies a predetermined host machine of the status of a process notified from at least any of said job accepting means, said generating means and said printing means.

15. The printer according to claim 1, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
- 16-29. (Cancelled)
30. The printer according to claim 4, wherein said extracting means searches for predetermined language identifying information from among the series of reception data and specifies a language kind of the print job data to be extracted.
31. (Canceled)
32. (Canceled)
33. (Canceled)
34. The printer according to claim 4, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
35. The printer according to claim 5, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
36. The printer according to claim 6, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
37. The printer according to claim 7, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
38. The printer according to claim 8, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
39. The printer according to claim 9, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.

40. The printer according to claim 10, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
41. The printer according to claim 11, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
42. The printer according to claim 12, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
43. The printer according to claim 13, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
44. The printer according to claim 14, wherein said RAW-mode physical channel is at least one selected from a serial interface, a parallel interface and a USB interface.
45. The printer according to claim 7, further comprising spool means for storing the print job data assigned with the job identifying information to be outputted in a predetermined order, said generating means interpreting the print job data to be outputted from said spool means and generating image data.
46. The printer according to claim 7, wherein said extracting means searches for predetermined language identifying information from among the series of reception data and specifies a language kind of the print job data to be extracted.
47. The printer according to claim 46, wherein said extracting means extracts print job data from among the series of reception data on the basis of end-edge pattern data corresponding to the specified language kind.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.

Transmittal (1 page)
Response to Notification of Non-Compliant Appeal Brief (2 pages)
Amended Appellant's Brief Under 37 C.F.R. Section 1.47 (26 pages)
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